

REMARKS/ARGUMENTS

Claim 1 is amended to add substituent group A.

The amendment of Claim 1 is supported by:

page 23, line 10 - page 24, line 2;  
page 27, lines 24 - 26 (for R5 and R6);  
page 29, lines 1 - 3 (for R7 - R13);  
page 29, lines 10 - 12 (for R14 and R15);  
page 29, lines 25 - 27 (for R16 - R22);  
page 30, lines 4 - 6 (for R23 and R24); and  
page 30, lines 26 - 28 (for R25 and R26).

The amendments of Claims 12 and 13 are supported by Claims 12 and 13 themselves.

The amendments also avoid the formal objection.

(A) Claims 1, 14, 15, 23, 24, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (WO 03/084973 A1), English equivalent US 2005/0147843 A1 relied upon.

With respect to Kobayashi et al., the Examiner states that "The carbazole containing phenylpyridine ligands disclosed have free rotation of the carbazole blocked (second and third structures [0094]) the platinum complexes of such ligands would meet instant formulae (7) and (8)."

Specifically, the Examiner states that "While Kobayashi et al. do not specifically exemplify a platinum complex with these ligands, this does not negate a finding of obviousness under 35 USC 103 since a preferred embodiment such as an example is not controlling." On the other hand, nothing in Kobayashi et al. leads to the conclusion that using platinum would provide special results.

Attached hereto is a DECLARATION UNDER 37 CFR 1.132 of Tomohiro OSHIYAMA, with evidence in response to the Examiner's reasoning in support of the *prima facie* obviousness rejection. This also takes into account the reduced scope of claim 1. More specifically, when a platinum complex having a carbazole containing phenylpyridine of which free rotation of the carbazole is blocked is compared with an iridium complex having the same carbazole containing phenylpyridine of which free rotation of the carbazole is blocked, as an emission dopant of an organic EL

element, the platinum complex showed unexpectedly higher "External Quantum Efficiency" and unexpectedly longer "Emission Life" than those of the iridium complexes. This is shown in Item (1) of the 1.132 declaration attached to the present response.

Such superior properties of the platinum complex as a host material of an organic EL element can never be expected from Kobayashi et al.

On page 16, lines 4-8 of the present specification, it is described that the organic EL element having a platinum complex of the present application exhibits a largely improved emission life while exhibiting a high emission efficiency which has been one of the characteristics of the conventional platinum complex.

Accordingly, claim 1 of the present application is not shown or suggested over Kobayashi et al.

(B) Claims 1, 12-15, and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kita et al. (JP2003/0109758 A), machine translation relied upon.

The Examiner states on pages of 19-20 of the outstanding Office Action mailed on March 26, 2010 as follows:

"As rejected claim 1 is significantly broader than examples presented in the declaration and the specification, which

applicant cites as an example of unexpected results and which are limited to a comparison of compositions containing a specific complexes with phenyl (unsubstituted and methyl or trifluoromethyl substituted), methyl and trifluoromethyl substituted phenylpyridines, the evidentiary showing is far from being commensurate in scope with the degree of patent protection sought."

In response to this position, the scope of the claims is reduced and additional data is presented to add examples showing unexpected results of the present application as follows:

Compound 8 in page 34 of the specification having a trimethylphenyl group of which free rotation is blocked;

Compound 10 in page 34 of the specification having a pyridyl group of which free rotation is blocked; and

Compound 11 in page 35 of the specification having a naphthyl group of which free rotation is blocked.

It is clear from Table 2-3 in the 1.132 DECLARATION attached to the present response that OLED's 2-44, 2-45 and 2-46 employing above Compounds 8, 10 and 11, respectively, as emission dopants each exhibit unexpectedly higher "External Quantum Efficiency" and unexpectedly longer "Emission Life" than those of OLED 2-1 in Table 2 in page 143 of the Specification (which is also shown in

Table 2-3 of the 1.132 declaration), employing Ir-1 having neither an aryl group of which free rotation is blocked nor an aromatic heterocycle group of which free rotation is blocked as an emission dopant, while CBP is used as an emission host of each of the above organic EL elements.

Further, the scope of claim 1 was reduced so as to include the limitations for the substituents in Formulas (3) - (8) as described above.

According to above arguments A and B, above amended claim 1 and claims dependent thereon should be allowed.

Claims 16 and 17 are rejected over Sato in view of Kita (as applied above). Sato is relied on to show the device in which the complex of Kita is to be used.

However, as detailed above, the present invention provides unexpected results when the required complexes are used for the electroluminescent material.

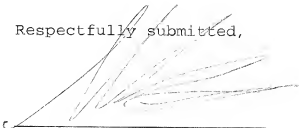
Claims 18 to 21 are each rejected over a combination of Kita with different secondary art. Kita is applied as above and the above arguments respond to these rejections, including the showing of unexpected results.

Claim 22 is rejected over Sato in view of Kita. However, as detailed above, unexpected results are obtained by the invention device. Adding Sato does not change that the results are unexpected.

In view of the above, it is submitted that the invention is not shown or suggested by the combined art.

Holtz, Holtz, Goodman  
& Chick PC  
220 Fifth Ave., 16th Floor  
New York, NY 10001-7708  
Tel. No.: (212) 319-4900  
Fax No.: (212) 319-5101  
MJC:sg:ddf

Respectfully submitted,

  
MARSHALL J. CHICK  
Reg. No. 26,853

Encs.: (1) **Petition for Three Month Extension of Time**  
(2) **DECLARATION UNDER 37 CFR 1.132 of**  
**Tomohiro OSHIYAMA dated September 21, 2010**